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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,686

12/29/2005

Stefan Schek

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HOUSTON ELISEEVA
4 MILITIA DRIVE, SUITE 4
LEXINGTON, MA 02421

EXAMINER

SORRELL, ERON J

ART UNIT

PAPER NUMBER

2182

MAIL DATE

DELIVERY MODE

04/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/501,686	SCHEK, STEFAN	
	Examiner	Art Unit	
	ERON J. SORRELL	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/16/04</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 7 recites the limitation "the on/off ratio" in lines 2-3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. Claims 1,2,12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cardova et al. (U.S. Patent No. 4,318,137 hereinafter "Cardova") in view of Fourkas et al. (U.S. Pub. No. 2006/0057497 hereinafter "Fourkas").

6. Referring to claim 1, Cardova teaches a data processing method, characterized by the following steps:

acquisition of data blocks in real-time (see abstract);
transmission of the acquired data blocks to a computer system (see abstract); and

processing of the data blocks as a function of a frame burst ratio (N) (see abstract).

Cardova fails to teach the method being used in a scanning microscope with a fast scanner and the data is acquired with a fast scanner.

Fourkas teaches a scanning microscope with a fast scanner that acquires data (see paragraph 52).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Cardova with the above teachings of Fourkas in order to process the data captured by the microscope in real time as suggested by Cardova.

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7. Referring to claim 12, Cardova teaches a computer system and a peripheral connected to the computer system (see figure 1), wherein data blocks are transmissible from the local storage units to the computer system (see abstract), in which case a frame burst ratio (N) is selected such that optimal utilization of the computer system's performance is achieved, and in that the transmitted data blocks that are a function of the frame burst ratio (N) can be processed in peripheral device (27).

Cardova fails to teach a scanning microscope with a fast scanner, consisting of a scanning module, a position sensor, and at least one detector and with one input device, characterized in that a local storage unit is allocated to the fast scanner.

Fourkas teaches, a scanning microscope with a fast scanner, consisting of a scanning module, a position sensor, and at least one detector and with one input device, characterized in that a local storage unit is allocated to the fast scanner (see figure 1 and paragraph 52).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to combine the teachings of Cardova with the above teachings of Fourkas in order to process the data captured by the microscope in real time as suggested by Cardova.

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8. Referring to claims 2 and 13, Cardova teaches the transmission of the acquired data blocks is a function of the frame burst ratio (N), in which case the frame burst ratio (N) is selected such that optimal utilization of the computer system's performance ensues (see "real time recording" in abstract).

9. Claims 3-11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cardova in view of Fourkas as applied to claim 2 above, and further in view of Scott et al. (U.S. Patent No. 5,469,398 hereinafter "Scott").

10. Referring to claims 3 and 14, the combination of Cardova and Fourkas teaches the method of claim 2 as shown above, however the combination fails to teach the frame burst ratio (N) is selected by the user as a function of the processing characteristics of the computer system, and in that it remains constant during acquisition of the data blocks.

Scott teaches, in an analogous system, the frame burst ratio (N) is selected by the user as a function of the processing characteristics of the computer system, and in that it remains constant during acquisition of the data blocks (see line 21-32 of column 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Cardova and Fourkas with the above teachings of Scott in order to provide the user with an override mechanism to control the systems data transfer rate.

11. Referring to claim 4, Cardova teaches that all data blocks are stored in the computer system, and in that those data blocks that are specified by the constant frame burst ratio (N) are processed (see abstract, "burst data is stored").

12. Referring to claims 5 and 17, Scott teaches that adaptive control is envisioned that makes the frame burst ratio (N) variable (see lines 21-32 of column 5).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Cardova and Fourkas with the above teachings of Scott for the same reasons as mentioned above.

13. Referring to claims 6 and 16, Scott teaches that an initial value is specified for the frame burst ratio (N) at the start of data acquisition (see lines 6-13 of column 7).

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It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Cardova and Fourkas with the above teachings of Scott for the same reasons as mentioned above.

14. Referring to claim 7, Scott teaches Method according to claim 6, characterized in that the frame burst ratio (N) determines the frequency of the transmitted data blocks and of the on/off ratio, respectively, and is adapted to the current performance of the computer system; in that all data blocks are stored in the computer system; and in that those data blocks that are specified by the variable frame burst ratio (N) are processed (see lines 21-32 of column 5 and lines 6-13 of column 7).

15. Referring to claim 8, Scott teaches the frame burst ratio (N) is selected by the user as a function of the processing characteristics of the computer system and remains constant during acquisition of the data blocks, and in that at the same time only those data blocks that correspond to the fixed frame burst ratio (N) specified by the user are transmitted to the computer system and are processed by the computer system (23) (see lines 21-32 of column 5).

16. Referring to claim 9, Cardova teaches the data blocks that have not yet been transmitted are transmitted to the computer system with a delay and are then processed (see abstract).

17. Referring to claims 10 and 11, Scott teaches the frame burst ratio (N) is selected as a function of the processing characteristics of the computer system and are adapted by the computer system during acquisition of the data blocks; and in that at the same time only those data blocks that correspond to the variable frame burst ratio (N) are transmitted to the computer system (see lines 21-32 of column 5) and Cardova teaches the data blocks that do not correspond to the variable frame burst ratio (N) are transmitted and/or processed to the computer system with a delay (see abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERON J. SORRELL whose telephone number is (571)272-4160. The examiner can normally be reached on Monday-Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be

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reached on 571-272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eron J Sorrell/
Primary Examiner, Art Unit 2182
April 24, 2009